

C3  
Cont

Sub  
E3

21. (NEW) The apparatus of claim 19 in which said interface machine further comprises a personal computer having a soundcard and running an audio streaming program and in which said monitoring station is a computer running a streaming audio program and having a soundcard electrically connected to a loudspeaker.

22. (NEW) The apparatus of claim 21 in which said soundcard in said monitoring station further includes a microphone interface.

23. (NEW) The apparatus of claim 19 in which said packet network further comprises an Ethernet connection, and said transmitted stream is addressed only to the monitoring system and said output stream is addressed only to the interface machine.

#### REMARKS

Applicant appreciates the Examiner's review of the present Application, and requests reconsideration in view of the preceding amendments and the following remarks. Claims 1, 2 and 4-18 are pending in the present Application. Applicant has requested that claims 2 and 11 be cancelled, and that claims 19-23 be added, after which claims 1, 4-10, 12-23 will be pending in the application.

#### Rejection under 35 U.S.C. § 112.

The Examiner has rejected claim 10 under 35 U.S.C. § 112, second paragraph, as being indefinite for failure to particularly point out and distinctly claim the subject matter which Applicant regards as the invention, and specifically because the recitation of "communication mechanism is a remote telephone" is allegedly vague when read in view of the "remote communication mechanism" of claim 1.

Applicant has amended claim 10 in order to more particularly point out and distinctly claim Applicant's invention. Applicant requests that the Examiner reconsider the amended claim and withdraw the rejection in light of the amendment.

The 103(a) Rejection

The Examiner has rejected Claims 1,2 and 4-18 under 35 U.S.C. §103(a) as being unpatentable over Krishnaswamy et al. (U.S. Pat. No. 5867494) in view of Iwami et al. (U.S. Pat. No. 5604737). Notwithstanding the amendments to the claims herein, Applicant respectfully traverses this rejection.

The Examiner asserts the Krishnaswamy discloses a remote modem, a gateway, and a second sound processing mechanism, and that Iwami discloses the elements of a converter, and a first sound processing mechanism, and that there is some motivation to make this combination of references. Applicant submits that the Examiner has merely selected and aggregated disjoint elements mentioned in two separate references and asserted these individual elements as disclosing Applicant's claimed invention, without regard to the claimed elements, their functions or interconnections of the several elements. This approach clearly does not provide a proper basis for the rejection of Applicant's claims, since the invention lies in the distinctly claimed inventive structures, functions and interconnections of the elements, and not merely a disjoint recitation of an assortment of functional elements.

Applicant's claim 1, as amended herein, recites "a remote modem configured in said remote system," "a converter electrically interconnected to a telephone interconnection of said remote modem and splitting a portion of said telephone transmission signals therefrom and providing an audio output signal," "an interface machine ... including a first sound processing mechanism," "audio output signal for transmission over said WAN," "a second sound processing mechanism... at the local system," and "processing ... to provide a continuous audio signal at said local system," along with additional corresponding functional requirements. The Office Action cites Krishnaswamy as disclosing some of these elements, with Iwami disclosing the others, and in no particular order or configuration.

It must be appreciated that the elements the Examiner has cited from Krishnaswamy, namely "a remote modem... an interface machine... and a second sound processor," appear to be completely unrelated to each other, let alone connected in the manner recited and structurally implemented with the functionality recited in Applicant's claimed invention. As disclosed and claimed by Applicant, a local and remote system communicate a network audio signal via a WAN. The Examiner has cited no element of Krishnaswamy that creates a network audio signal of any kind.

Furthermore, since Krishnaswamy addresses Internet telephony, which relates only to transmission of digitized telephone signals, not audio signals, the entire user information stream must go through the modem and be converted into data rather than through the separate split path for an audio signal as disclosed and now more clearly claimed by Applicant. The complex telephone interface as described in the reference is inherently limited to converting telephone bandwidth rather than the more comprehensive audio signaling and streaming of data disclosed and claimed by Applicant.

As the Examiner readily admits, Krishnaswamy does not teach an "audio output signal converter" interposed between a modem and an interface machine. It should be appreciated that the absence of this feature in the reference is for the simple reason that no audio output signal is ever transmitted between local and remote systems in the reference, only digital packets. Since the reference fails to teach or suggest any mechanism for creating the Applicant's claimed "audio output signal," there would naturally be no teaching of an equivalent input for any "interface machine" to create the claimed "network audio signal."

The "interface machine" disclosed and claimed by Applicant receives an audio output from the converter and creates a network audio signal by using a sound processing mechanism. Any "sound processing" taught by Krishnaswamy does not result in a "network audio signal," since no "audio signal" of any kind is needed or desired in that art during transmission. Therefore, the "gateway, interface machine" cited by the Examiner in the reference could not possibly be equivalent to Applicant's claimed "interface machine," because it has no function whatever or structural inter-relationship that is related to processing an audio signal from an audio converter, nor does it produce a network audio signal. Similarly, nothing in Iwami discloses or suggests any of the structure or functional relationships claimed by Applicant and lacking from Krishnaswamy.

Given the deficiencies of the cited Krishnaswamy, and that the cited Iwami reference fails to remedy these deficiencies, a combination of Krishnaswamy and Iwami does not disclose nor suggest the present invention as the Examiner alleges. Because neither Iwami nor Krishnaswamy, alone or in combination, disclose or suggest Applicant's invention as recited, claim 1 and claims 4-7 dependent therefrom are allowable over the cited prior art.

Further, Applicant asserts that neither reference discloses nor suggests any motivation to combine these references in the manner suggested by the Examiner. Accordingly, Applicant

respectfully submits that the rejection of claims 1-2, 4-18 under section 103 should be reconsidered and withdrawn.

Similarly, with respect to the rejection of independent claim 8, the claim recites an "audio output signal" in the step of converting, and other steps and functions of the method which is substantively the same as the invention in claim 1. For the same reasons that the claimed structures, functions, and interconnections cannot be found in the cited references to reject claim 1, they cannot be found to reject claim 8 or any of its dependent claims. For this reason alone, claim 8 and its dependencies are each allowable over any combination of Krishnaswamy and Iwami.

Regarding claim 6, the Office Action is completely silent regarding which (if any) portion of the cited references would teach or suggest the recited "sound card configured to run an audio streaming program."

For these and similar reasons, Applicant also submits that the added claims 19-23 are allowable over the cited references. In particular, nothing in the cited references, either alone or in combination, teaches or suggests the recited electrical audio converter, a stream of encoded audio data packets, an impedance and voltage matching converter, a loudspeaker, a microphone, or a one-to-one bi-directional stream over an Ethernet.

#### Second 103(a) Rejection

The Examiner has also rejected claims 1, 2, 4-18 under 35 U.S.C. § 103(a) as unpatentable over Huang (PCT WO 97/23078) in view of Solomon et al (USP 5,974,043). Applicant respectfully traverses this rejection for the following reasons.

The Office Action states that Huang Fig. 3A, ref. 13, teaches a converter. The reference appears to convert telephone "analog trunks" to digital trunks for compatibility with other digital trunks. It should be appreciated that Applicant's claimed invention does not have any "digital trunks" and therefore no need to convert signals in any such manner as taught in Huang.

Applicant's claim 1 recites a converter for "providing an audio output" from "telephone transmission signals." Similarly, Applicant's claim 8 recites the step of "converting said transmission signal into an audio output signal." Since Huang teaches only analog trunk to digital trunk, there is no "audio output" anywhere in the Huang disclosure, let alone one which is further processed according to anything remotely like Applicant's claimed invention. Therefore,

Applicant's claimed converter cannot be anticipated by the Huang "converter." For this reason alone, claims 1 and 8, and each of their respective dependent claims are allowable over any combination of the cited references.

Furthermore, nothing in Huang or Solomon, either alone or in combination, teaches or suggests the recited "soundcard configured to run an audio streaming program," as recited in claims 6, 17, and 18. The Examiner has cited Fig. 3a, refs 22 and 23 as "processing audio signals." The referenced structures in Huang are clearly marked ASIC and DSP (i.e., digital signal processor), and have inputs and outputs that are all digital. Therefore, it is unclear what possible relevance, if any, these structures may have for Applicant's claimed "audio" processing. They certainly do not teach or suggest any "processing of audio signals," nor any "soundcard," nor any "audio streaming program." For these additional reasons, these claims contain allowable subject matter over the combination of the cited references.

Furthermore, Applicant asserts that neither reference discloses nor suggests any motivation to combine these references in the manner suggested by the Examiner. Accordingly, Applicant respectfully submits that the rejection of claims 1-2, 4-18 under section 103 should be reconsidered and withdrawn.

For these and similar reasons, Applicant also submits that the added claims 19-23 are allowable over the cited references. In particular, nothing in the cited references, either alone or in combination, teaches or suggests the recited electrical audio converter, a soundcard generating a stream of encoded audio data packets from an audio signal, a soundcard processing a stream of encoded audio data packets into an audio signal, an impedance and voltage matching converter for electrically matching a telephone signal with an audio signal, a soundcard having a loudspeaker or a microphone connection, or a bi-directional stream of encoded audio data packets between an interface personal computer running an audio streaming program and a monitoring station running an audio streaming program, across an Ethernet.

#### Claim Amendments

To more clearly and distinctly claim the invention, Applicant has amended claim 1 to recite a converter for "splitting a portion of said telephone transmission signal" from the input signal. This amendment is fully supported by the specification and the drawings, specifically page 8, line 5. Nothing in the cited references teaches or suggests such a signal splitting for any

purpose, let alone for converting the split signal into an audio signal for further processing. Applicant respectfully requests the Examiner to consider the amended claim 1 in view of the remarks hereinbefore and allow it over the prior art.

Applicant has also amended claim 6 to further clarify and distinctly claim the invention. In particular, claim 6 recites "a sound card ... configured to transmit said network audio signal in the form of packets addressed only to said second sound processing mechanism." In each reference cited by the Examiner in the prior rejections, the art is directed to Internet telephony in which a telephone device is connected to another via the Internet. However, there is nothing in any of the cited references that would teach or suggest a sound card particularly configured in the manner recited by Applicant.

Applicant has also amended claim 8 to further clarify and distinctly claim the invention. In particular, claim 8 clarifies that the output of the recited converter is an "analog audio output signal," which further distinguishes it from any digitized audio signal. Also, the transmission across the WAN is now claimed as a "stream of audio packets." Nothing in any of the cited references teaches or suggests this aspect of the invention. In fact, every one of the references is aimed at Internet telephony, in which discrete packets are routed independently. There is nothing in any of the references that teaches or suggests a "stream" of packets, such as from a simple streaming audio program as is taught in the specification at page 8, lines 7-14, among other places. Because claim 8 recites functions and structures not found in the cited references, and has been amended to incorporate additional limitations not found in any of the cited references, claim 8 and all of its dependent claims are allowable over any combination of the cited references.

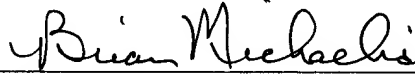
Additional amendments have been made to claims 9-16 to more clearly and distinctly claim the invention. Ample support for each amendment is found in the original specification and drawings in the application.

Accordingly, Applicant urges that all claims in the present Application are in condition for allowance. Early and favorable action is respectfully requested.

The Examiner is invited to telephone the undersigned, Applicant's Attorney, to facilitate advancement of the present Application.

Respectfully submitted,

Brown Rudnick Freed & Gesmer PC



Brian Michaelis  
(Registration No. 34,221)  
Box IP, 18th floor  
One Financial Center  
Boston, Massachusetts 02111

Tel: (617) 856-8369  
Fax: (617) 856-8201

Date: March 28, 2000

BLM/BCN

#897567 v1 - nelsonbc - j8kf011.doc - 19898/13



RECEIVED  
MAR 30 2000  
TC 2700 MAIL ROOM